

U.S. Department of Energy



National Energy Technology Laboratory

February 21, 2001

Dear Colleague:

As a key individual in deep drilling and completion technology for oil and gas exploration and production, you are invited to participate in a day-and-a-half workshop to formulate an action plan for Deep Trek, a proposed new initiative for the Department of Energy's (DOE) Oil and Gas Program. On Tuesday and Wednesday, March 20-21, 2001, DOE's Office of Fossil Energy and Office of Energy Efficiency and Renewable Energy, through the National Energy Technology Laboratory and the Sandia National Laboratories, respectively, will host a collaborative workshop in Houston, Texas at the Hotel Sofitel. The purpose of the workshop is to gather your input on the technology gaps and needs to facilitate exploitation and production of deep oil and gas reserves in drilling and completing deep wells, and what and how the DOE can contribute in industry/ government collaboration to meet these needs.

The limits of conventional well construction technology are tested in drilling and completing deep wells. The rock is typically hot, hard, abrasive, and highly pressured. The produced fluids are, in many cases, corrosive. Control of well bore trajectory and placement of casing and cement are difficult problems. Deep-well solutions will require new technologies and processes. These may include, for example, new drilling approaches that incorporate advanced information technology, new bits, and new high-temperature materials, sensors, and electronics. This workshop will discuss the problems encountered in construction of deep wells and will identify the technology and R&D required to help overcome these problems. We want to hear *your* perspectives on the issues, opportunities, and actions that are needed. We plan four concurrent breakout sessions: drilling and completion fluids, completion-based well design, advanced smart drilling, and drilling diagnostics and sensor systems.

The agenda, a registration form, and information regarding hotel reservations follows. A game plan will be e-mailed to you one week prior to the workshop with more details on the breakout sessions. Please confirm your participation by sending your registration form to the conference coordinator, MaryLee Blackwood at Energetics or faxing it to 410.423.2193. You can also call me at 304.285.4692 or Sam Varnado of Sandia at 505.845.9555. A poster session will be available if there is enough interest. Thank you for your consideration, and we look forward to hearing from you.

Sincerely,

Brad Tomer Product Manager Gas Exploration, Production & Storage Strategic Center for Natural Gas National Energy Technology Center Sam Varnado, Ph.D. Director Infrastructure & Information Systems Center 6500 Sandia National Laboratories